

**AMENDMENTS TO THE ABSTRACT**

Please delete the section entitled “ABSTRACT OF THE DISCLOSURE” in its entirety and substitute the following section therefor:

**ABSTRACT OF THE DISCLOSURE**

An apparatus for performing cryptographic operations. The apparatus includes an x86-compatible microprocessor that has fetch logic, algorithm logic, and execution logic. The fetch logic is configured to receive a single, atomic cryptographic instruction as one of the instructions in an application program executing on the x86-compatible microprocessor. The single, atomic cryptographic instruction prescribes ~~one of the cryptographic operations~~an encryption operation and one of a plurality of cryptographic algorithms. The algorithm logic is operatively coupled to the single, atomic cryptographic instruction. The algorithm logic directs the x86-compatible microprocessor to execute the ~~encryption operation~~one of the cryptographic operations according to the one of a plurality of cryptographic algorithms. The execution logic is operatively coupled to the algorithm logic. The execution logic executes the ~~encryption operation~~one of the cryptographic operations. The execution logic includes a cryptography unit for executing a plurality of cryptographic rounds required to complete the ~~encryption operation~~one of the cryptographic operations